



THE RELATION BETWEEN LEADERSHIP AND EXPECTED RESULTS FROM THE EDUCATIONAL PROCESS WITHIN SCHOOL CULTURE

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Abstract/Izveček School culture is a multifaceted concept, comprising multiple dimensions. The present research explored relations between selected dimensions: between the dimension focused on shared objectives, trust in school leadership, and on a managerial approach, and the important dimension focused on the innovation process and the results expected from the education process. School leaders using the School Culture Inventory evaluated current and desired school culture in their primary schools to identify culture gaps. The research findings should help school leaders in planning to shape the culture and innovate the strategy of the schools they manage.

Ključne besede:
šolska kultura, šolski
vodje, kulturne vrzeli,
popis šolske kulture,
oblikovanje šolske
kulture

Povezave med vodenjem šol in pričakovanimi rezultati izobraževalnega procesa v okviru šolske kulture

Šolska kultura je večplasten pojem, ki vključuje različne vidike. V pričujoči raziskavi preučujemo povezave med izbranimi vidiki, in sicer med vidikom, ki se osredinja na skupne cilje, zaupanje v vodstvo šole, pristope vodenja, ter vidikom, ki izpostavlja proces inovacij in pričakovane rezultate izobraževalnega procesa. V raziskavi so vodstva šol s pomočjo »Popisa elementov šolske kulture« ocenila sedanjo in zeleno šolsko kulturo na svojih osnovnih šolah z namenom ugotavljanja vrzeli. Izsledki raziskave naj bi bili vodjem šol v podporo pri oblikovanju šolske kulture in pri inoviranju strategije šol, ki jih vodijo.

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Introduction

An important topic in the area of school management is the search for evidence on whether the key elements of a strong, positive school culture are linked to sustainable school improvement and the subsequent application of positive experiences in practice (Lee and Louis, 2019). Currently, researchers from a number of countries are paying significant attention to leadership in education settings (e.g. Bush, 2016; Heikka, Waniganayake, and Hujala, 2021; Wu and Shen, 2022; Yavuz and Gulmez, 2018)

As stated by Sun and Leithwood (2012), improving student achievement has become the focus of policymakers in many jurisdictions. Effective school leaders have a strong, positive influence, directly or indirectly, in improving schools and their outputs (Pont, Nusche and Hopkins, 2008; Leithwood, Day, Sammons, Harris, and Hopkins, 2006b; Yildirim, 2018). Increased focus on school autonomy, education and its outputs has also raised the importance of the role of school leaders in managing schools and in turn, necessitates a reassessment of their role in shaping school culture at the time of implementation of a new school development plan.

Previous studies underline that school culture is an integral part of school improvement (cf. Gruenert and Whitaker, 2015; Lee and Louis, 2019). Nevertheless, a school's culture can work not only for but also against improvement and reform. There is frequently reported evidence that leadership makes a difference in schools (e.g., Hallinger and Heck, 1996; Lindahl, 2010; Louis, Dretzke, and Wahlstrom, 2010, Osiname, 2018). Experts in the area of education have made contributions to the question of how the behaviour of school leaders contributes to pupil achievement. Unfortunately, most research studies have examined a limited range of leadership behaviour, thus making comparisons across studies difficult (cf. Ariyani, Suyatno, and Zuhaer, 2021; Lee and Louis, 2019). There is a need for further research (e. g., Ariyani et al., 2021; Louis et al., 2010; Sun and Leithwood, 2012) to investigate the nature of school leadership, its impact on achievement results of the educational process, and how such impacts differ across contexts (e. g., school level and type).

The objective of this research is to explore the interrelationship between selected dimensions of school culture and their influence on expected performance. The study will address the following question.

What is the relationship between leadership and management in primary schools and the innovation process and expected results of education? This question tests the significance of leadership at primary schools in the school culture concept for one of the critical objectives for schools today: increasing the innovation process and expected pupil learning outcomes.

Theoretical background

School leadership and expected outcomes of the educational process within school culture

In general, the school leader's mission is to lead the school in the right direction and to motivate the key actors in the school and other stakeholders to do the same. As a leader, the school head applies the aspects and strategies of leadership to manage the school's resources to achieve the school's goals (cf. Ariyani et al., 2021). He or she strives to accomplish these together with other people and in cooperation with them.

A highly discussed topic is the extent to which school leaders affect the educational process and school performance (Witziers, Bosker and Krüger, 2003). This study focuses, therefore, on a topic of importance not only for the Czech Republic (CR), but also in a wider context (c.f. Ariyani et al., 2021; Bush, 2013; Leithwood and Jantzi, 2006; Pont et al., 2008).

Although there are divergent views among organisational theorists about the nature of culture (Fidler, 2002), many authors have agreed that organizational culture has a deep impact on a variety of organizational processes, including teachers and school performance (e. g.; Cameron and Quinn, 2011; Deal and Peterson, 1999). Therefore, school leaders are advised to develop strong cultures in their organizations to achieve greater commitment and improve the overall performance of the organization (Ginevičius and Vaitkūnaitė, 2006; Shahzad, Luqman, Khan and Shabbir, 2012).

Kulhavy (1990) stated that school culture includes everything in a school's surroundings that is made by human beings, and includes tangible items as well as intangible concepts and values. Schein (2016) stated that understanding the culture results in understanding the organization.

Leithwood and Riehl (2003) argued that leadership is the most significant of all factors and represents nearly one-quarter of the total effect of all school factors.

Oplatka and Hemsley-Brown (2007, p. 303) declared that ‘principals have a major role in the changing of the school culture.’ This research focuses on specific leadership practices in relation to strengthening school culture and underlines the role of developing a shared vision and building consensus in school strategy (cf. Sun and Leithwood, 2012).

Changes in the management of particular schools often result in challenges for school culture (Burkhauser, Gates, Hamilton and Ikemoto, 2012). Dolton and Newson (2003) found that negative changes in school culture also influenced student achievement, a result which confirms the association between leadership and expected teaching and learning outcomes within school culture (cf. Nielsen and Taggart, 2021). The analysis by Lee and Louis (2019) suggests a clear link between schools with a strong culture and their continuous improvement in school-level achievement. Among other features of a strong culture are listed staff commitment to pupil support and learning, teacher collaboration and collegiality, academic press and improving pupil achievements (Tamir and Ganon-Shilon, 2021).

To achieve new insight regarding the role of leadership within the school culture, this study will address these two research questions:

Q1: What are the main culture gaps in primary schools?

Q2: Will the leadership and management dimension of the School Culture Inventory have a positive relationship with the innovation processes dimension and with the expected results of the educational process?

The size and type of school and school culture

Another topic discussed in the literature is whether the size of the school affects its organisational culture (Lee and Louis, 2019; Pavlidou and Efstathiades, 2021). Smaller schools may offer greater possibilities to develop personal social relations that support staff cooperation, a friendly climate and communication with parents. On the other hand, large schools usually offer better and more specialised equipment, teaching staff with varied specializations and, of course, the school management comprises more than one person. Leithwood and Jantzi (2005) in their review argue that school size may significantly affect leadership. Moreover, Yildirim (2018) found both positive and negative opinions among principals according size and type of school. Within this context, this study also centres on a specific research question:

Q3: Do the size and type of school influence the differences in the evaluation of the selected dimensions of school culture?

Research method

As mentioned above, school culture is a multifaceted concept, comprising several dimensions (e.g., Higgins-D'Alessandro and Sadh, 1998; Hinde, 2004; Zhu, Devos and Tondeur, 2014). It should also be noted that the culture of a school forms over time, and Hallinger (2018) also foregrounds the role of national cultural context. Maslowski (2005) conducted a critical review of previous school culture inventories and declared that questionnaires could be a valuable tool in diagnosing school culture. For example, the School Culture Scale by Zhu et al. (2014) was used to measure five school culture dimensions with regard to goal orientation, leadership, innovation orientation, participative decision-making, and formal relationships. Next, the model proposed by Bell and Kent (2010) applied the dynamics and importance of both external and internal organizational forces in shaping the culture of schools. Furthermore, research by Pavlidou and Efstathiades (2021) focused on internal marketing strategies, using a construct of school culture with six components and a range of variables. As with Fidler's (2002) features (dimensions) of school culture, this construct focuses on leadership, external and internal communication (including staff cooperation and relationship with children), school aims and attitude to innovation. Given the context of the Czech Republic, it does not address the dimension of multicultural orientation.

The study focuses on the dimensions of school culture within Czech schools and follows a pilot study by Eger and Prášilová (2020). The theoretical construct of this research was prepared on the basis of a literature review (among others, Bush, 2003; Everard, Morris and Wilson, 2004; Fidler, 2002; Gruenert, 2000; Maslowski, 2006; Peterson and Deal, 1998). This research explored school culture empirically, using a quantitative research design (Creswell, 2014). The School Culture Inventory is used to gather data with the aim of establishing what dimensions of school culture affect the expected results of the educational process in selected primary schools.

Sample

Data was collected by distributing a closed questionnaire to a sample of school leaders of primary schools in the Czech Republic (this type of school corresponds to the international classification ISCED 1 and 2, Stará and Starý, 2019). The respondents were school heads (170) or their deputies (92) who participated in the project ‘Strategic Management for Planning at Schools and in Regions’, which was supported by the National Pedagogical Institute of the Czech Republic. Participants completed the course voluntarily based on their interest in improving their school and came from all regions of the CR. Data for this study thus came from school leaders (convenience sample) who were attending the first module of this project focused on school culture. Each respondent evaluated their own school.

The sample consists of two types of primary schools. The first one includes primary schools with their own kindergarten ($n = 91$), and the second comprises primary schools without a kindergarten ($n = 171$).

In addition, the research sample included primary schools with different numbers of pupils. In the Czech Republic (EURYDICE, 2021), on average, there were 20.3 pupils in classrooms in the first stage and 21.5 in the second stage of primary schools. Large schools are usually situated in towns and in regional cities, where the number of pupils in classrooms is often above average. The schools in the sample were divided into small schools with up to 200 pupils ($n = 102$), medium-sized schools with 200 – 500 pupils ($n = 113$) and large schools with more than 500 pupils ($n = 47$), based on knowledge of the educational environment in the CR.

Instrument

The cultures of the selected schools were examined using the School Culture Inventory developed by Eger and Jakubíková (2001) based on ideas by Everard and Morris (1996); Everard et al., (2004); Fidler (2002); along with a description of Handy’s four culture models by Bush (2003). The instrument has been used for self-evaluation activities in the CR since 2001 in diverse school settings (e. g., Eger and Prášilová, 2020; Hornáčková, Princová and Šimková, 2014). The School Culture Inventory contains 16 items that were developed to assess school culture in important domains by creating dimensions (variables) of school culture. The construct of the questionnaire is consistent with similar research (e. g., Gruenert, 2000, Turan and Bektas, 2013) and meets key school culture traits established by Sukkyung, Ann and Sun (2017).

Some items partly align with research by Leithwood and Jantzi (2006), who used robust tools in their study aimed at transformational school leadership.

This tool evaluates school culture in five selected dimensions (see Table 2). The first dimension, Leadership and management, contains four items focused on shared objectives, trust in school leadership, and the managerial approach, that is, task management and control. The second dimension, the School environment, contains three items focused on organizational structure and delegation, working conditions, along with the aesthetic environment and cleanliness. The third dimension, Communication, contains three items focused on teacher motivation, information exchange, and communication with parents and stakeholders. The fourth dimension, Relationships within the school, contains three items focused on supportive leadership style, relationships and teacher collaboration, and teacher-pupil relationships. The fifth dimension, focused on the Innovation process and the Results expected from the educational process, contains three items, two of which are mentioned above. These five dimensions and their interrelationships constitute the framework for our evaluation of school culture (Eger and Prášilová, 2020).

Based on the theory given above (cf. Everard et al., 2004; Leithwood, Day, Sammons, Harris and Hopkin, 2006a), the study also evaluates the relationship between the Leadership and management variable and the variable Innovation process and Expected pupil learning outcomes. In this study, Innovation process and Expected pupil learning results create dependent variables that depend on the national strategy in education and the general postulated fact that a positive culture of organisation supports achieving the needed results of the educational process (cf. strong culture and student achievement, Lee and Louis, 2019; Tamir and Ganon-Shilon, 2021).

The School Culture Inventory uses a five-point Likert scale, and for more detailed description of each school culture item, contains short, detailed descriptions. For example, the item Shared Objectives has a detailed description for point 1 = no awareness of school objectives, no planning, and the opposite for point 5 = full knowledge of shared objectives, clear orientation, common planning. Item 16 has a detailed description for point 1 = no good results expected, no interest, and the opposite for point 5 = high expectations of excellent teaching and learning results. The strength of the tool is that it is useful for identifying culture gaps (Kilman-Saxton, c.f. Peters and Waterman, 1982) between current (existing) cultures and desired school cultures.

The findings about culture gaps are very important when school leaders plan to shape a positive culture, including a positive climate (c.f. Leithwood et al., 2006b; Peterson and Deal, 1998).

Procedure

Two experienced academic experts coordinated the research. One was also responsible for the module focused on the school culture in the NPI project. The questionnaires were administered as part of a workshop where participants were asked to indicate their familiarity with items on the School Culture Inventory (current state and desired state for each item). This means that one respondent, who was a school head or deputy head (both are included under the term school leaders) evaluated their own school using experience from practice. The participants also assessed the desired state of school culture using the same tool.

Data analysis

First, a descriptive and correlational analysis was conducted to explore the actual level of school culture in selected primary schools. It applied the identification of the culture gap (Kilmann-Saxton) between the current (existing) culture and the desired school culture using descriptive statistics. Second, another purpose of the study was to investigate the relations between selected dimensions of the School Culture Inventory. The comparison between the dimension of Leadership and management and the dimension of the Innovation process and the Expected outcomes of the educational process was investigated using the Mann–Whitney *U* test. According to the Kolmogorov-Smirnov test, the variables were non-normally distributed, recommending nonparametric statistical tests (Jackson, 2016). Data were analysed using MS Excel and Statistica software. Third, to analyse whether school size influenced school culture and differences in selected dimensions of school culture, the Kruskal-Wallis test was used. In addition, to analyse whether school type influenced school culture and differences in selected dimensions of school culture, the Mann–Whitney *U* test was used.

For clarity, Figure 1 shows an investigation model comprising all presented questions and key hypotheses together.

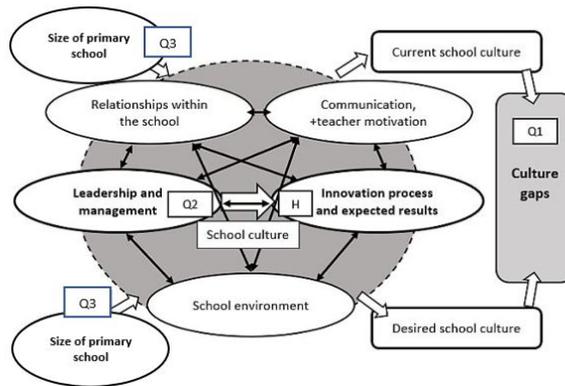


Figure 1: Investigation model

Results

Descriptive statistics for items from the School Culture Inventory are provided in Table 1. First, the means and standard deviations for each item were calculated.

Table 1: List of items, School Culture Inventory

Items	Primary schools ($n = 262$)			
	Current culture		Desired culture	
	Mean	SD	Mean	SD
1 Shared objectives	3.4	0.7	4.4	1.2
2 Trust in school leadership	3.8	0.7	4.6	1.0
3 Supportive leadership style	3.4	0.8	4.6	0.8
4 Organizational structure and delegation	3.9	0.7	4.7	1.1
5 Managerial approach – task management	3.5	0.7	4.2	0.8
6 Managerial approach - control	3.6	0.8	4.7	1.2
7 Motivation of teachers	3.2	0.7	4.7	1.3
8 Communication in the school and information exchange	3.8	0.7	4.7	1.0
9 Communication with parents and stakeholders	3.8	0.8	4.7	1.2
10 Innovation of teaching and learning process	3.3	0.7	4.4	1.0
11 Teacher development	3.7	0.7	4.7	0.9
12 Working conditions at the school	3.6	0.7	4.7	1.0
13 Aesthetic environment and cleanliness	3.7	0.7	4.4	0.9
14 Collaboration among teachers in the school	3.8	0.9	4.7	1.1
15 Teacher-student relationships	3.6	0.7	4.6	1.0
16 Expectations of education results	3.1	0.6	4.0	0.8

Note. *SD* = standard deviation. Cronbach's alpha for the overall score on the School Culture Inventory was .88.

Identification of culture gaps (Kilmann-Saxton) between current cultures and desired school cultures are presented in Table 1 and Figure 2. The findings showed where the problems lie in school cultures and where opportunities exist for school leaders when they are thinking about school development and shaping school culture. Standard deviation shows how spread out the respondent evaluations are from the mean. The highest SD occurs in the item Motivation of teachers and the lowest in the items Supportive leadership style, Managerial approach and Expectation of educational results.

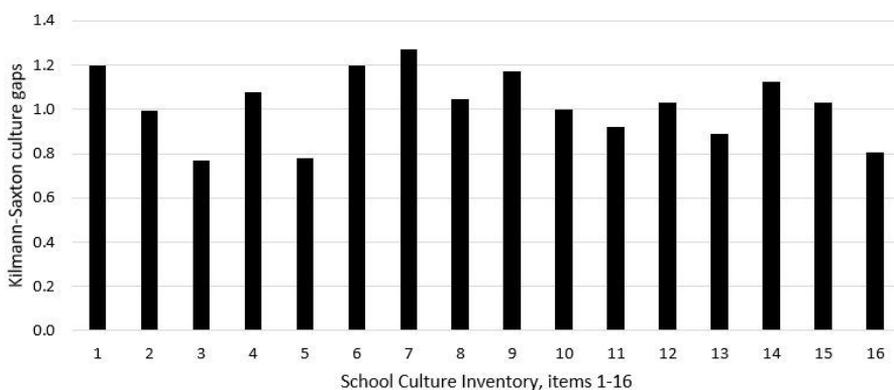


Figure 2: Kilmann-Saxton culture gaps, primary schools in the Czech Republic
($n = 262$)

Table 1 shows that the main culture gaps were identified in the following items of the School Culture Inventory: Motivation of teachers (1.3), Shared objectives, Managerial approach – control, and Communication with parents and stakeholders (1.2), followed by the items: Organizational structure and delegation and Collaboration among teachers in the school.

To assess the relations between the five selected dimensions = variables (Leadership and management, School environment, Communication, Relationships within the school, Innovation process and Expected results of education), bivariate Pearson correlation analysis was carried out. The correlation matrix was used to find the dependence among variables from our construct. Table 2 visualizes correlation coefficients between sets of variables - the dimensions of the School Culture Inventory.

Table 2: Bivariate correlations among dimensions (variables) used in analysis, primary schools ($n = 262$)

Items	1	2	3	4	5
1 Leadership and management					
2 School environment	0.53				
3 Communication, including teacher motivation	0.65	0.64			
4 Relationships within the school	0.58	0.58	0.63		
5 Innovation process and expected results	0.56	0.62	0.63	0.56	
Mean	3.4	3.6	3.6	3.7	3.5
<i>SD</i>	0.52	0.54	0.59	0.60	0.47

Note. $p < .05$

Table 2 shows that all dimensions of the school culture construct have a moderate positive relationship with each other, including relationships between Leadership and management, and the Innovation process and Expected results dimension ($r = .56$). The highest positive relationships were found between the dimensions Leadership and management and Communication, including Teacher Motivation ($r = .65$).

To compare the difference between the Leadership and management dimension and the Innovation process and Expected results of the educational process dimension, the Mann–Whitney U test was applied between the two groups of schools according to their results in the Leadership and management dimension. The sample of respondents was split in half, according to their evaluation results in this dimension, and the test was used to verify the null hypothesis.

H10 There is no association between a positive evaluation of school culture in the Leadership and management dimension and positive expected results in the dimension focused on the innovation process and the expected results of the educational process.

H1A Schools with a positive evaluation of school culture in the Leadership and management dimension achieve significantly higher positive evaluations in the dimension focused on expected results in education.

Figure 2 shows the distribution of evaluation results in the Innovation process and Expected results of the educational process dimension, according to the two groups of leaders and their schools.

The first group of schools represents half the primary schools ($n = 131$), with higher evaluations by school leaders in the Leadership and management dimension. The second one is the opposite group.

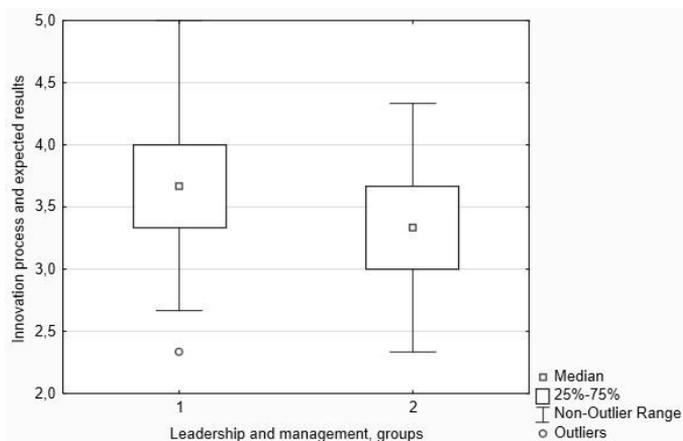


Figure 3: Two groups of primary schools divided according to Leadership and management

Figure 3 uses a boxplot visualization to graphically show the distribution of results in the Innovation process and Expected results of the educational process dimension for two groups of respondents from primary schools.

The median for groups of school leaders with higher evaluations in the sub-category Leadership and management was 3.75. The median for the second group of leaders from primary schools is 3.0. The box that comprises the middle 50% of results is smaller than the first group. Spacing between the distinct parts of this boxplot indicates the degree of dispersion and skewness in the data and displays an outlier. To test whether there was a statistically significant difference between the two groups of leaders from primary schools in terms of their evaluation of the Leadership and management dimension to the results in the Innovation process and Expected results of the educational process dimension, the statistical non-parametric approach was used (the Mann–Whitney U -test). Following the Mann–Whitney results (Z -Score = 6.588, $p = .0000 < .05$), Hypothesis H10 was rejected and the alternative hypothesis H1A accepted, which indicates that a significant difference was found between the two groups of schools in the innovation process and the expected results of the educational process using self-evaluation of their leaders.

In addition, to test differences between the two groups of primary schools in terms of their evaluation of the Leadership and management dimension to results for other dimensions of school culture, the statistical non-parametric approach was also used (the Mann–Whitney *U*-test).

The results indicate significant differences between the two groups of primary school leaders in the School environment dimension (Z -Score = 6.733, $p = .000 < .05$), Communication, including Teacher motivation (Z -Score = 7.478, $p = .000 < .05$), and Relationships within the school (Z -Score = 6.344, $p = .000 < .05$).

In addition, an analysis of whether school size influences the outputs in the selected dimensions of the school culture investigation was made using the Kruskal-Wallis test. No statistically significant differences were found between the selected dimensions of school culture depending on the size of the school (3 categories) (null hypotheses were confirmed by the Kruskal-Wallis test).

Next, an analysis was made of whether the type of primary school influences the outputs in the selected sub-categories of the school culture investigation using the Mann–Whitney *U*-test. No statistically significant differences were found between these dimensions of the school culture depending on the size of the school (2 categories) (null hypotheses were confirmed by the Mann–Whitney *U*-test).

Discussion

Regarding the first research question, the results indicated that culture gaps in Czech primary schools were found primarily in the items Shared objectives, Managerial approach – control, and Communication with parents and stakeholders. The findings also show that school leaders should pay attention to items such as Organizational structure and delegation and Collaboration among teachers in the school.

This research also explored the relationships between the five dimensions using the School Culture Inventory (Table 2). As noted above, experts in the Czech Republic and other countries are seeking ways to improve schools and their performance. The key issues are, first, the role played by school leadership and management and, second, whether a positive relationship exists between leadership and management at primary schools and the innovation process and expected results of the educational process. The research showed positive and significant relationships between the Leadership and management dimension and the dimension of School innovation process and the Expected outcomes of the educational process.

This finding is supported by Bush (2013), Leithwood et al. (2006), and Peterson and Deal (1998) and confirms the important role of school management and leadership in relation to the expected performance of the educational process in schools (cf. Nielsen and Taggart, 2021; Pavlidou and Efstathiades, 2021; Wu and Shen, 2022). The research also found positive relationships between the dimensions Leadership and management and Communication, including Teacher motivation, similar to research by Lubis, Sagala, S., Saragih and Sagala, G. H (2021) in which trust building in school settings is further emphasized. In addition, results of previous research pinpoint the key elements of school culture (cf. Lee and Louis, 2019; Maslowski, 2006; Peterson and Deal, 1998) that have been linked with sustainable school improvement.

The dimensions of the School Culture Inventory also contains an item focused on teacher development that is a precondition for the innovation process and expected performance in education at each school. In practice, teacher development, teacher motivation and support of relationships within the school are connected with care for the most important school resource (cf. Blanuša Trošelj, Peić Papak, and Zuljan, 2021; Erichsen and Reynolds, 2020).

The findings contribute to the discussion of how the elements of a strong school culture are associated with levels of school achievement (Lee and Louis, 2021). The findings show that school leadership does play a decisive role. Fidler (2002, p. 103) argued “If the school’s aims are widely shared across the school this probably means the school’s culture is a strong one.”

Moreover, positive relations were also found among all the other dimensions in the created construct of school culture. The construct meets key features (dimensions) of the school culture by Fidler (2002) and is also supported by previous research conducted by Louis et al. (2010).

The findings also indicate differences in the distribution of results in the dimension of Innovation process and the Expected results of the educational process for two selected groups of primary school leaders under the results of school leaders’ self-evaluation in the Leadership and management dimension. A positive evaluation of school management and leadership yields higher than expected results in the dimension of Innovation process at schools and Expected results of the educational process. The findings of the study thus support the claim that the identified level of leadership and management in the construct of school culture determines and limits the expected results, which are an important part of the strategy.

Because, as Schein (1985) stated, culture determines and limits strategy (cf. Ginevičius and Vaitkūnaitė, 2006).

The findings of this research are also in line with findings by Osiname (2018), who stated that successful leaders achieve their goals by collaborating and communicating with all stakeholders (internal and external) to establish a school community that is safe for teachers and pupils. The findings also confirm the results from a previous survey by Eger and Prášilová (2020) in which the school culture was evaluated by final-year students at the Faculties of Education from two universities after one month at the school.

The national context affects school leadership in many ways, and the effects of national context have been insufficiently explored in terms of school leadership (Hallinger, 2018; Shaked, 2021). The findings of this study support the results of research conducted, for example, by Janovská, Orosová and Janovský (2016) in Slovakia and partially that by Faas, Smith and Darmody (2018) in Ireland. Similarly, Zhu et al. (2014) found differences between Flemish and Chinese schools regarding school culture dimensions. Further research should take into account whether similar dimensions of a strong school culture exist in varying geographical jurisdictions.

Surprisingly, the additional analysis did not reveal an effect of school size or type of primary school on the relationship between the two main dimensions (variables) in this research sample, i. e., between Leadership and management and Expected results of the educational process. This finding does not align with the claim by Pavlidou and Efsthadiades (2021) and opens up opportunities for further research, again in an international context.

Limitations

Two methodological limitations of the study warrant caution in interpretation of the results. First, the results of this study are relevant to primary schools in the Czech Republic (ICED 1 and 2). However, the results are important for understanding school culture and leaders' role in shaping school culture from an international point of view. A second methodological limitation of the research was a measure of the dimensions Innovation process and the Expected results of the teaching and learning process. In practice, the performance of the school would have been better represented by data from PISA, TIMSS or similar national comparisons of learning outcomes.

Conclusion and implications

This study extends and deepens the understanding of culture gaps in primary schools (ICED 1 and 2) and shows how it is possible to evaluate not only current, but also desired, school culture as part of the self-evaluation process. It is hoped that the results of the research will provide new knowledge for improving the professional development of school leaders, based on findings from the application of the School Culture Inventory.

The practical application of the research lies in recognizing the current situation of school cultures, including culture gaps. The culture of an organization is a complex construct and contains tangible and intangible features and thus, in practice, tends to get less attention from leaders. In the field of education, leaders sometimes concentrate more on strategy, which is relatively easy to understand and create. Ignoring culture, however, leads to underperformance and may even lead to the school 'going out of business'. The results have important implications for recognizing the key role of school leaders in relation to the expected results of teaching and learning process. By confirming that schools with higher positive evaluation in the Leadership and management dimension achieve higher positive evaluations in the dimension of the educational process, the research also brings new knowledge for innovation in training school leaders.

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